

USSN: 10/693,263
Art Unit: 3682
Examiner: Hansen, Colby M.

AMENDMENT
Dated: 02/21/2006
Page: 6 of 12

REMARKS

1. No Fee for Claims

There are now 6 claims total. The number of independent claims is unchanged. There is now 1 dependent claim. There are no multiple dependent claims. It is submitted no fee for claims is required.

2. Entry of AMENDMENT

This **AMENDMENT** makes several changes in claims 1, 2 and 3, indicates the changed status of claims 4 and 5, and rewrites the last two paragraphs of claim 3 as new dependent claim 6/3. The table below summarizes the changes in claims 1, 2 and 3 and lists examples of support in the as-filed application for the changes in claims 1-3 and for new claim 6.

Claim 1, paragraphs (b), (c) and (d); and claim 2, paragraphs (d) and (e) describe with greater specificity the construction and especially the functions of the handle and the rod follower. Somewhat similarly, claim 3, paragraph (d)(3) describes the construction and functions of the handle and the stepped cylinder embodiment of the rod follower. These features are supported throughout pages 50-57 of the specification and throughout Figures 71-79 of the as-filed application. See, for example, the description at page 53, lines 9-21 (the 13 lines of text immediately following the heading "Summary of Operation"). See also the corresponding figures, for example, the depiction of the handle and the rod follower in Figures 74 and 76, and the illustration of the assembly thereof in Figures 71 and 72.

Support for new claim 6/3, the capture of the handle member between the retainer and the collar of the stepped cylinder, is found, for example, in Figs. 72, 74 and 76 and in the description thereof in the last paragraph of page 52 of the as-filed application.

USSN: 10/693,263
Art Unit: 3682
Examiner: Hansen, Colby M.

AMENDMENT
Dated: 02/21/2006
Page: 7 of 12

<u>Claim (paragraph)</u>	<u>Subject</u>	<u>Exemplary Location in Application</u>
1(b), (c) and (d)	Handle and relationship to rod follower and their bidirectional operation.	Pages 50-57. E.g., page 53, lines 9-21. See also individual components depicted in Figs. 74 and 76 and the assembly thereof in Figs. 71 and 72.
2(d), (e)	“	“
3(d)(3)	“	“
6	Capture of handle member to stepped cylinder.	Figs. 72, 74, 76. Page 52, last paragraph.

No new matter is involved in the above changes. Entry of the changes and of this **AMENDMENT** are requested.

3. Withdrawal of Objection to Drawings

The present Office Action required that the “securing means” in claim 3 be shown in the drawings or canceled from the claim. The phrase “securing means” has been canceled from the claims. Reconsideration of the objection to the drawings is requested, along with withdrawal of the objection.

4. Withdrawal of Rejection under 35 U.S.C. 112

The present Office Action rejected claim 3 under 35 U.S.C. 112, second paragraph, on the basis of the claim 3 language “a first upper section or collar” and “a second lower section or tube.” This language has been changed to “collar” and “tube,” respectively. Reconsideration and withdrawal of this rejection are requested.

The present Office Action also rejected Claim 3 under 35 U.S.C. 112, second paragraph, in this instance on the basis of the claim 3 language “securing means.” This language has been canceled. Reconsideration and withdrawal of this rejection are requested.

USSN: 10/693,263
Art Unit: 3682
Examiner: Hansen, Colby M.

AMENDMENT
Dated: 02/21/2006
Page: 8 of 12

5. Withdrawal to Rejections under 35 U.S.C. 102(b)

a. The Rejections

Claims 1, 2 and 3 stand rejected under 35 U.S.C. 102(b) on the basis of, first, US patent no. 361,227 to Morgan; second, US patent no. 407,842 to Schuermann; and third, US patent no. 2,320,119 to Burks.

b. Summary of Claims 1, 2 and 3

Claims 1, 2 and 3 (and new claim 6/3) specify the structure and function of a control rod mechanism which comprises a spiral rod and a control handle having two sections. One handle section is a spiral follower and the second handle section is mounted to, and rotatably captures or is rotatably captured by, the first handle section. The second handle section exposes the first handle section (spiral follower) so that the first handle section can be gripped selectively to prevent rotation of the first handle section and thus selectively force rotation of the rod. By moving the handle in opposite directions along the rod and selectively gripping and releasing the second handle section, the rod can be rotated clockwise and/or counterclockwise and repositioned after each rotating stroke for the next rotating stroke.

For brevity in the following discussion we sometimes refer to the repositioning strokes (those strokes of the handles which do not rotate the rod) as “neutral” strokes.

c. Patentability of Claims under Examination over Morgan US patent 361,227

Morgan '227 teaches a reversible hand-operated tool driver for driving and withdrawing screws, applying and withdrawing nuts, boring holes, etc. The driver includes an operating handle which is mounted for sliding movement along a spirally grooved drive shaft and includes an internal pawl and ratchet mechanism which effects reversible, bidirectional operation of the shaft, controlled by a knob in the handle. Specifically, the tool driver comprises spiral drive shaft A and a generally mallet-shaped casing or operating handle EF comprising (1) head F having an internal

USSN: 10/693,263
Art Unit: 3682
Examiner: Hansen, Colby M.

AMENDMENT
Dated: 02/21/2006
Page: 9 of 12

rotatable cylinder G which conforms to the cross section of the drive shaft for rotating and sliding along the shaft, and (2) a transverse extending handle E which is engaged manually for moving the operating handle along the shaft. The operating handle or casing EF mounts an internal bolt H which along with the cylinder is part of a pawl and ratchet mechanism.. The head H1 of the bolt is the rotatable knob end of the operating handle. Rotating the head/knob H1 180° reverses the operation of the pawl and ratchet, as follows.

First, with the knob H1 in the first of the two positions, the bolt H acts as a ratchet when the operating handle EF is moved in a first direction along the shaft A, allowing the cylinder G to turn and the shaft to remain stationary. When the operating handle is moved in the second direction along the shaft, the bolt acts as a pawl, preventing the cylinder from turning and causing the shaft to rotate in a first direction.

Second, with the knob H1 moved to the second position, the pawl and ratchet operation is reversed. The bolt H acts as a pawl when the operating handle EF is moved in the first direction along the shaft A, causing the shaft to rotate in the second direction. The bolt acts as a ratchet when the operating handle is moved in the second direction along the shaft A, allowing the cylinder to turn and the shaft to remain stationary.

In short, the tool driver disclosed in Morgan '227 uses an internal pawl and ratchet mechanism to control the direction of rotation of the shaft and the direction is selected using a knob.

The Morgan '227 tool driver does appear rotate in opposite directions and to have neutral or repositioning capability for each direction of rotation. However, Morgan '227 does not disclose or suggest even the broadest aspects of claims 1, 2, 3 and 6/3, namely, a two-section handle device comprising a handle and a spiral follower which rotates independently of the handle and is exposed so that the spiral follower can be selectively gripped to selectively prevent rotation thereof and to selectively force bidirectional rotation of the rod, during bi-directional movement of the two-section handle device along the rod.

Reconsideration of and withdrawal of the rejection claims 1, 2 and 3 under Morgan '227 are requested. Favorable consideration of the patentability of claims 1-3 and 6/3 is requested.

USSN: 10/693,263
Art Unit: 3682
Examiner: Hansen, Colby M.

AMENDMENT
Dated: 02/21/2006
Page: 10 of 12

d. Patentability of Claims under Examination over Schuermann US patent 407,842

Schuermann '842 discloses a handle-controlled tool driver comprising a spiral shaft a, a tool mounted at one end of the shaft, and a drive handle i. The drive handle is mounted along the shaft for reciprocating movement up and down the shaft. The drive handle incorporates a simple internal drive clutch mechanism which rides along spiral grooves in the shaft and freely rotates within the handle during upward movement, but is automatically locked against rotation during downward movement. Moving the handle downward locks the clutch against rotation and forces rotation of the shaft and the tool, whereas retracting the handle upwardly allows the drive clutch to rotate freely within the handle without rotating the shaft, that is, allows the handle to be retracted for another driving stroke.

Reciprocal movement of the Schuermann '842 handle along the shaft alternately drives the tool in a single direction and retracts the handle.

Schuermann '842 does not disclose or suggest a handle mechanism which provides bi-directional, multiple stroke rotation of a shaft or tool, let alone applicant's unique as-claimed approach comprising a two-section handle device which includes a handle and a spiral follower which rotatably captures or is rotatably captured by the handle and is exposed so that the spiral follower can be selectively gripped to selectively prevent rotation thereof, and selectively force bidirectional rotation of the rod, during bi-directional movement of the two-section handle device along the rod.

Reconsideration of and withdrawal of the rejection claims 1, 2 and 3 under Schuermann '842 are requested. Favorable consideration of the patentability of claims 1-3 and 6/3 is requested.

e. Patentability of Claims under Examination over Burks US patent no. 2,320,119

The operation of the wrench disclosed in the Burks '119 patent is described only briefly in that patent. There are two embodiments of the wrench, which appear to operate in the same two modes. The first embodiment uses spiral follower sleeve 13, Figures 1-7. The second embodiment uses spiral follower sleeve 19, Figures 8-12.

USSN: 10/693,263
Art Unit: 3682
Examiner: Hansen, Colby M.

AMENDMENT
Dated: 02/21/2006
Page: 11 of 12

In pertinent part, Burks '119 teaches a wrench comprising a twisted shank 12, a tool 11-holding chuck 10 mounted to the end of the shank, and a handle 16 which can be pivoted to an orientation transverse to the axis of the shank to thereby provide a "good" mechanical advantage. The handle is mounted to one of the two spiral follower sleeves 13 or 19, which in turn is mounted along the twisted shank. Moving the pivoted handle up or down along the shank would appear to rotate the shank in opposite directions. Alternatively, if the handle is in the non-pivoted orientation extending along the shank, as depicted in Fig. 1, the shank can not be rotated relative to the sleeve or the handle, and the wrench is used in a screw driver mode, that is, the tool 11 is rotated by rotating the wrench itself.

Burks '119 does not disclose a repositioning or "neutral" function in which the handle 16 is moved along the shank 12 without rotating the shank. Thus, to reposition the handle along the shank for another rotating or driving stroke, it would be necessary to lift the wrench off the work piece.

While the operation of the Burks '119 wrench is not entirely clear, one thing is clear: Burks '119 does not disclose or suggest even the broadest aspects of claims 1, 2, 3 or 6/3, namely, a two-section handle device comprising a handle and a spiral follower which rotatably captures, or is rotatably captured by, the handle and is exposed so that the spiral follower can be selectively gripped to selectively prevent rotation thereof and selectively force bidirectional rotation of the rod, during bi-directional movement of the two-section handle device along the rod.

Reconsideration of and withdrawal of the rejection of claims 1, 2 and 3 under Burks '119 are requested. Favorable consideration of the patentability of claims 1, 2, 3 and 6/3 is requested.

6. Summary and Action Requested

Entry of this **AMENDMENT** is again requested.

Reconsideration and withdrawal of the objection to the drawings and the rejections under 35 U.S.C. 112, second paragraph are requested, in particular, in view of the above-discussed revision of claim 3.

USSN: 10/693,263
Art Unit: 3682
Examiner: Hansen, Colby M.

AMENDMENT
Dated: 02/21/2006
Page: 12 of 12

Reconsideration of all rejections under 35 U.S.C. 102 is again requested. Whether considered individually or collectively, the above three patents do not teach or suggest the control rod combinations specified in claims 1, 2 and 3: two mating handle sections rotatably captured together for translation together in opposite directions along a spirally configured rod or shaft and for free rotation relative to one another; with one of the handle sections comprising a spiral follower and being accessible to an external gripping force for selectively, and readily preventing rotation of that handle section during translation of the two sections.

The construction and functions specified in claims 1, 2 and 3 uniquely allow the control rod mechanism to translate or rotate a load over short or long distances and in opposite directions to a desired location by gripping the handle and moving the handle back and forth along the rod while selectively gripping and releasing the spiral follower section of the handle. The cited patents simply do not teach or suggest the specified construction and functions. Claims 1, 2 and 3 patentably distinguish over the cited patents. Allowance of claims 1, 2 and 3 is respectfully requested.

Dependent claim 6/3 adds to the patentable combination of claim 3 structural specifics of the capture of the handle member to the stepped, cylindrical spiral thread follower. Allowance of dependent claim 6/3 is respectfully requested.

Respectfully submitted,
LAW OFFICE OF PHILIP A. DALTON

Date: 21 February 2006

By Philip A. Dalton 2/21/06
Philip A. Dalton
Attorney of Record, Attorney Registration #26859
236 West Portal Ave., #15
San Francisco, CA 94127-1423
Tel: 415.505.0716; Fax: 415.664.1001
E-mail: daltonlaw@sbcglobal.net